

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 07-313483

(43)Date of publication of application : 05.12.1995

(51)Int.Cl.

A61B 5/055  
G01R 33/422  
G01R 33/34

(21)Application number : 06-109467

(71)Applicant : GE YOKOGAWA MEDICAL SYST LTD

(22)Date of filing : 24.05.1994

(72)Inventor : KATO YASUSHI

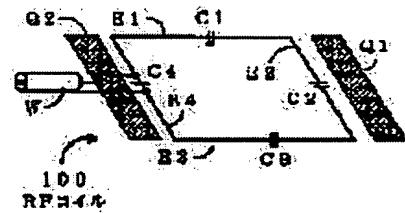
HOSHINO KAZUYA

## (54) TRANSMITTING AND RECEIVING METHOD AND RF COIL OF MRI DEVICE

### (57)Abstract:

PURPOSE: To provide the RF coil of the MRI device which can prevent unnecessary magnetic coupling with a testee body and a decrease in SNR.

CONSTITUTION: Shielding conductors Q1 and Q2 are provided along a couple of opposite elements E2 and E3 among elements E1, E2, E3, and E4 which constitute a rectangular loop. The RF coil 10 is installed so that the opposite direction becomes parallel to a main magnetic field, thereby cutting off an RF magnetic field component parallel to the main magnetic field and/or an MR (Magnetic Resonance) signal component outside an interested area. Consequently, a waste of excitation power is eliminated and no extra load is placed on an amplifier, etc. Further, even the testee body is not loaded. Furthermore, the pickup of an MR signal component from outside the interested area is suppressed and the SNR(Signal Noise Ratio) in the interested area can be improved.



### LEGAL STATUS

[Date of request for examination] 15.02.2001

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]